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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,292	03/05/2002	Hirokazu Tanaka	204552022500	3051

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Barry E Bretschneider  
Morrison & Foerster  
2000 Pennsylvania Avenue NW  
Washington, DC 20006-1888

EXAMINER
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BARR, MICHAEL E

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 04/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/070,292	Applicant(s) TANAKA ET AL.	
	Examiner Michael Barr	Art Unit 1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2004.  
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1-8 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/23/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, filed 3/23/2004, have been fully considered and reviewed by the examiner. Claims 1-8 are pending.

The applicant has argued that the Boeke reference would not produce the claimed charged and scattered substances on the surface of the polymeric material as Boeke uses long wavelength layers. The applicant state that it has been found that wavelengths above 600 nm would not provide the ablation of the polymer to the provide the charged and scattered substance. The applicant further provided an article by Touthoff to support this statement. The examiner is not persuaded by the applicant's argument and showing. The applicant has not provided a factual showing or evidence that the charged and scattered substances can only be produced by wavelengths less than 600 nm. The article by Touthoff only indicates that laser wavelength is an important consideration in an ablation process, but does not provide any evidence that wavelengths less than 600 nm would be required provide the charged and scattered substance. Therefore, the submitted article by Touthoff does not sufficient substantiate the applicant's assertion as to the criticality of having a wavelength of 600 nm or less. Thus, it is the position of the examiner that the applicant has still failed to provide a factual showing that the laser wavelength of 600 nm or less is critical for providing the desired charged and scattered substances. If the applicant can provide such a showing, then the examiner would withdraw the rejection. Without such a showing, it is the examiner's position that Boeke would have provided the claimed charged and scattered substances by exposure to the laser, as Boeke teaches the

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claimed inorganic filler and exposure to the laser. Furthermore, the mere observation of still another beneficial result of an otherwise old process cannot form the basis of patentability (*Allen et al. vs. Coe* 57 USPQ 136).

As far as the claimed laser wavelength requirements, it would have been obvious to one skilled in the art to use the YAG laser at a wavelength of 193-308 nm, in Boeke et al., with the expectation of providing the desired electroless plating pretreatment on the polyphenylene sulfide article, since it is shown by Hiraoka et al. that such a wavelength is conventionally used in the art for YAG lasers used to pretreat polyphenylene sulfide molded articles for electroless plating, which is the desire of Boeke et al. The combination of Boeke and Hiraoka is predicated on the laser wavelength of Hiraoka providing substantially equivalent results as that of Boeke. If the applicant can provide a showing that the laser wavelength, in the claimed range, provides unexpected results (i.e. providing the charged and scattered substances), while that of Boeke would not, then the examiner would withdraw the rejection. As the applicant has not provided such a showing, the examiner is maintaining the rejections as previously set forth.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2 and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boeke et al. in view of Hirsch et al. and Hiraoka et al.

Boeke et al., Hirsch et al., and Hiraoka et al. are applied here for the same reasons as given above and in paragraph 4 of the previous office action.

4. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiraoka et al. in view of Hirsch et al. and Boeke et al.

Hiraoka et al., Hirsch et al. and Boeke et al. are applied here for the same reasons as given above and in paragraph 5 of the previous office action.

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Barr whose telephone number is 571-272-1414. The examiner can normally be reached on Monday-Thursday 6:00 am-3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on 571-272-1415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael Barr  
Primary Examiner  
Art Unit 1762

A handwritten signature in black ink, appearing to read 'Michael Barr', with a stylized flourish at the end.

MB  
April 7, 2004